

What is claimed is:

~~Claims~~

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1. A linoleum-based planar structure characterized in that it contains over the whole cross section flakes comprising an organic polymeric material, the flakes being compatible with the linoleum base composition and having a particle size in the range of 0.5 to 30 mm and a thickness in the range of 1.0 to 400  $\mu\text{m}$ .
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2. The linoleum-based planar structure according to claim 1, wherein the thickness of the flakes is within the range of 1.5 to 50  $\mu\text{m}$ .
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3. The linoleum-based planar structure according to claim 1 or 2, wherein the organic polymeric material is selected from the group consisting of a material containing the reaction product of at least one dicarboxylic acid or one polycarboxylic acid or derivatives thereof or a mixture thereof with at least one epoxidation product of a carboxylic acid ester or a mixture of said epoxidation products, poly(meth)acrylates, polyvinylacetates, and a mixture thereof.
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4. The linoleum-based planar structure according to claim 3, wherein the dicarboxylic acid is maleic acid, itaconic acid, fumaric acid, succinic acid, methylsuccinic acid, malic acid, furandicarboxylic acid, phthalic acid, tartaric acid, or citraconic acid, or a mixture thereof containing at least two of these acids.
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5. The linoleum-based planar structure according to claim 3, wherein the polycarboxylic acid is selected from citric acid, aconitic acid or trimellitic acid.

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- (a) preparing a linoleum base composition,  
(b) adding flakes comprising an organic polymeric material, the flakes being compatible with the linoleum base composition and having a particle size in the range of 0.5 to 30 mm and a thickness in the range of 1.0 to 400  $\mu\text{m}$  to the linoleum base composition, and  
(c) rolling out the linoleum composition obtained in step (b) by means of a roller assembly into a linoleum sheet.
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15. The process according to claim 14, wherein the step (c) concurrently includes the steps of providing a carrier in web form and coating one side of the carrier with at least one upper layer of the linoleum composition obtained in step (b).
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16. The process according to step 14, further comprising the steps of:  
(d) cutting the linoleum sheet obtained in step (c) into chips by means of rotating cutters,  
(e) rolling out the thus obtained chips by means of a roller assembly into a linoleum sheet, and  
(f) optionally applying the linoleum sheet obtained in step (e) as a wear layer onto a single layer linoleum web to obtain a multi-layered linoleum floor covering.
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17. The process according to claim 16, wherein before step (e) chips of different color are added to the chips obtained in step (d).
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18. The use of the planar structure according to anyone of claims 1 to 13 as a floor covering.

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